

Remarks

The Applicants note with appreciation the withdrawal of all of the prior rejections.

Claims 13-24 stand rejected under 35 U.S.C. §112, first paragraph as failing to comply with a written description requirement. The Applicants note with appreciation the Examiner's helpful comments concerning support for the coating comprising at least 20% by weight of a light stabilizer component based on the weight of a copolymer. Those comments in particular point out that the description in the second paragraph of page 18 of the Specification refers to the coating comprising at least 20% by weight of a light stabilizer component based on the weight of the resin component.

The Applicants respectfully submit that the latter comment in the rejection reveals a translation error between the Applicants' U.S. Specification and the original Japanese language PCT Application. In other words, that portion of the Applicants' Specification contains inadvertent translation errors. The Applicants therefore enclose an English translation of lines 12-18 of the Applicants' page 18. That translation is enclosed on a separate sheet of paper and is accompanied by a verification of translation.

The Applicants have accordingly amended page 18 of Specification to replace the original language spanning lines 12-18 with the new language. Inasmuch as the replacement language is based on a verified translation of the Applicants' PCT Application, the Applicants respectfully submit that the amendment is fully supported by that original PCT document and respectfully requests that the amendment to the Specification be entered into the Official File.

The Applicants respectfully submit that the Specification as amended in accordance with the verified English translation makes it clear that the coating comprises at least 20% by weight of light stabilizer component based on the weight of the copolymer. Thus, the Applicants respectfully

submit that all of Claims 13-24 are in full compliance with the first paragraph of §112. Withdrawal of the rejection is respectfully requested.

Claims 13-24 stand rejected under 35 U.S.C. §103 over the combination of Oberg with Miyakawa. The Applicants again note with appreciation the Examiner's detailed comments applying the combination to those rejected claims. The Applicants nonetheless respectfully submit that even if one skilled in the art were to make the hypothetical combination, the resulting film would be different from what the Applicants claim. Detailed reasons are set forth below.

The Applicants fully agree with the Examiner's frank acknowledgement that Miyakawa is silent as to the coating layer comprising a copolymer of an acrylic resin with a light stabilizer. The rejection turns to Oberg to cure that deficiency. However, the Applicants respectfully submit that Oberg fails to provide disclosure that can, when combined with Miyakawa, cure the deficiency. The reason is that Oberg does not disclose a polymer-bound hindered amine. Specifically, although Oberg discloses hindered amines, they are not polymer-bound hindered amines. Such hindered amines of Oberg are contrasted to the Applicants' claimed copolymer of a light stabilizer component that includes at least a hindered amine. In other words, Oberg fails to disclose copolymers including hindered amines.

This is demonstrated in the Oberg examples. Example 1 of Oberg is an acrylic polymer-bound benzotriazole. Example 2 is a coating composition containing the acrylic polymer-bound benzotriazole of Example 1. In Example 4, a triazine and a hindered amine are added into the coating composition of Example 2. However, the triazine and the hindered amine are merely added into the coating composition, but are not polymerized with the coating composition. Hence, in Example 4, only a benzotriazole is polymerized with the coating composition --- not the hindered amine.

Therefore, hypothetically combining Oberg with Miyakawa fails to result in “a copolymer of a resin component and at least 20% by weight, based on the weight of the copolymer, of a light stabilizer component that includes at least a hindered amine” as claimed by the Applicants.

In Example 4 of Oberg the polymer-bound light absorber is benzotriazole only. It is disclosed in Example 1 of Oberg that “A polymer-bound ultraviolet light absorber containing 2.0% benzotriazole, based on the total coating solid, was prepared ...”. It is not clear whether “the total coating solid” means the acrylic resin including benzotriazole or total coating composition of Example 4. If it means acrylic resin, the amount of the light stabilizer of copolymer is 2.0% by weight. If it means the total coating composition, the amount of the light stabilizer of copolymer is lower than 1.5% by weight ($2.0\% \times 75.51\text{g}/(100+\alpha)\text{g}$). Either way, the amount of the light stabilizer of copolymer is far lower than the claimed amount of 20% by weight. As a consequence, the Applicants respectfully submit that the combination of Oberg with Miyakawa is still inapplicable to the Applicants’ claimed subject matter. Withdrawal of the rejection is respectfully requested.

Claims 13-24 stand rejected under 35 U.S.C. §103 over the combination of Behrens with Miyakawa. Again, the Applicants note with appreciation the Examiner’s frank acknowledgement that Miyakawa is silent with respect to the coating layer comprising a copolymer of an acrylic resin with a light stabilizer. The Applicants nonetheless respectfully submit that the combination of Behrens with Miyakawa would still not result in the Applicants’ claimed subject matter. This can be seen by referring to the portion of Behrens highlighted in the rejection, namely column 16, lines 38-40, as well as additional portions of Behrens such as the preceding text from line 29 down to line 38 and, of course, line 40.

In column 16, lines 29 to 40 of Behrens, it is disclosed that

“To attain maximum light stability, the current use of other conventional light stabilizers can be advantageous. ... , these

additional light stabilizers can be added to the clear coat and/or the pigmented base coat. In such combinations are employed, the sum of all light stabilizers is 0.2 to 20% by weight, preferably 0.5 to 5% by weight, based on the film-forming resin."

It is not sure whether the stabilizer of "the sum of all light stabilizers" includes a polymer-bound light stabilizer. Nonetheless, the Applicants assume hereunder that Behrens relates to N-OR₁ substituted hindered amine light stabilizer. The other conventional light stabilizers are merely added to the coating layer. They are not polymerized with the resin of the coating layer. Hence, the stabilizers of "the sum of all light stabilizers" include not only a polymer-bound light stabilizer, but also a non-polymer-bound light stabilizer.

Therefore, hypothetically combining Behrens with Miyakawa fails to result in "a copolymer of a resin component and at least 20% by weight, based on the weight of the copolymer, of a light stabilizer component that includes at least a hindered amine" as claimed by the Applicants. As a consequence, the Applicants respectfully submit that hypothetically combining Behrens with Miyakawa results in a composition that is completely different from what the Applicants claim. Withdrawal of the rejection is respectfully requested.

Claims 13-17, 23 and 24 stand rejected under 35 U.S.C. §103 over the combination of Oberg with Ishii. The Applicants note the Examiner's frank acknowledgement that the Ishii does not disclose a protective layer containing a copolymer, an acrylic resin and a hindered amine light stabilizer. Thus, the rejection turns to Oberg to make up for that deficiency. The Applicants have already established that Oberg does not cure the deficiency of Miyakawa. Inasmuch as Oberg is cited to cure the same deficiency in Ishii that was applied in the rejection concerning Miyakawa, the Applicants respectfully submit that Oberg fails to cure the same deficiency of Ishii. Thus, the Applicants respectfully submit that even if one skilled in that art hypothetically combined Oberg with Ishii, the resulting film would still not produce a coating layer comprising a copolymer of the

resin component and at least 20% by weight, based on the weight of the copolymer, of a light stabilizer component that includes at least a hindered amine. Withdrawal of the rejection is respectfully requested.

Claims 20 and 21 stand rejected under 35 U.S.C. §103 over the further hypothetical combination of Miyakawa with Behrens and Ishii. Inasmuch as Behrens has been demonstrated as failing to cure the deficiencies set forth above with respect to Ishii and Miyakawa, the combination of all three of those references would fail to result in the Applicants' claimed polymer-bound or copolymer of a hindered amine. Withdrawal of the rejection is respectfully requested.

Claims 13-17, 23 and 24 stand rejected under 35 U.S.C. §103 over the combination of Behrens with Ishii. The Applicants have already established that Behrens fails to cure the deficiencies set forth above with respect to Miyakawa. Inasmuch as Ishii fails to disclose the hindered amine light stabilizer in the same manner as Miyakawa, the Applicants respectfully submit that combining Behrens with Ishii would result in a composition that is essentially no different from the combination with Miyakawa --- which would not result in a film including a polymer-bound or copolymer of a hindered amine. Withdrawal of that rejection is also respectfully requested.

In light of the foregoing, the Applicants respectfully submit that the entire Application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,



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